



STIC Search Report

EIC 3700

STIC Database Tracking Number: 100742

TO: Gary Welch
Location: CP2 4A18
Art Unit: 3765

From: Jeanne Horrigan
Location: EIC 3700
CP2-2C08
Phone: 305-5934

Case Serial Number: 10/029131

jeanne.horrigan@uspto.gov

Search Notes

Attached are the search results for the elastomeric article with improved gripping surface, including author and prior art searches in foreign and international patent databases and prior art searches in medical, textile, chemical, and general sci/tech non-patent literature databases. I also searched the Internet using the Google search engine.

Also attached is a search feedback form. Completion of the form is voluntary. Your completing this form would help us improve our search services.

I hope the attached information is useful. Please feel free to contact me (phone 305-5934 or email jeanne.horrigan@uspto.gov) if you have any questions or need additional searching on this application.

JH

*I tagged what I thought was most relevant, but
I suggest you review all the references.*

Jeanne

File 155:MEDLINE(R) 1966-2003/Aug W2
File 5:Biosis Previews(R) 1969-2003/Aug W1
File 73:EMBASE 1974-2003/Aug W1
File 34:SciSearch(R) Cited Ref Sci 1990-2003/Aug W1
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 144:Pascal 1973-2003/Aug W1
File 94:JICST-EPlus 1985-2003/Aug W1
File 95:TEME-Technology & Management 1989-2003/Jul W4
File 65:Inside Conferences 1993-2003/Aug W2
File 8:Ei Compendex(R) 1970-2003/Aug W1
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Jun
File 248:PIRA 1975-2003/Aug W1
File 323:RAPRA Rubber & Plastics 1972-2003/Aug
File 31:World Surface Coatings Abs 1976-2003/Jul
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13

Set	Items	Description
S1	150116	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	324749	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	64143	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	15817	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	4809	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	108137	(ACRYLIC OR METHACRYLIC) ()ACID OR ACRYLONITRILE
S7	182478	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	1011	S1 AND S2
S9	79759	S3:S4
S10	108	S5(S)S6
S11	8	S8 AND S9
S12	0	S8 AND S10
S13	8	S11
S14	8	RD (unique items)

14/6/3 (Item 3 from file: 95)

01248040 M98100234630

Schutzhandschuhe per Datenbank sicher auswaehlen

1998

14/7,K/5 (Item 5 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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00997487 T96066061141

Titel russisch

(Ein neues Verfahren zur Herstellung von faserverstaerkten Verbundstoffen und seine physikalisch-chemischen Prinzipien)

(A new technology for production of fiber composites and their physico-chemical principles)

Artemenko, SE; Kardas, MM

Univ. Saratov, RU

Chimiceskie Volokna, v199, n6, pp15-18, 1995

Document type: journal article Language: Russian

Record type: Abstract

ISSN: 0023-1118

ABSTRACT:

Bei der Herstellung von faserverstaerkten Verbundstoffen werden gebrauchte Fasern in der entsprechenden Form (Gewebe, Vlies, lineare Textilien) vorwiegend mit einem Harz impraegniert. Harzbildende Oligomere koennen nur im beschaenkten Mass in die Fasern diffundieren. Dadurch entwickelt sich

in diesen Fasern eine Kern-Mantel-Struktur. Es wurde ein neues Verfahren entwickelt, das dadurch gekennzeichnet ist, dass die harzbildenden Oligomere in Anwesenheit der Fasern hergestellt werden. Dadurch werden einige Herstellungsschritte erspart. Die fuer die Herstellung der Harze eingesetzten Monomere koennen in die Faserstruktur tiefer diffundieren, was zu einer Verbesserung der Faserhomogenitaet fuehrt. Ein auf diese Weise aus Viskosefasern und einem Phenolformaldehydharz produzierter Verbundstoff weist im Vergleich zu einem klassisch hergestellten Verbundstoff bessere mechanische Eigenschaften (um 20 % hoehere Biegefestigkeit und verdoppelte Schlagfestigkeit). Durch diese Monomerdiffusion und die folgenden chemischen Reaktionen werden die Fasern auch gegen die Verformung ihrer Querschnittform bestaendiger, was ihre Festigkeitsabnahme durch die Verarbeitung bei erhoehten Temperaturen und hohen Druucken reduzieren kann. Das neue Verfahren fuehrt auch zur Verbesserung der Flammwidrigkeit und der thermischen Bestaendigkeit. Durch eine Zugabe von weiteren Stoffen koennen Materialien mit einem neuen Eigenschaftenspektrum hergestellt werden. Diese Methode ist auch zur Herstellung von kleinen Mengen der Spezialstoffe geeignet. Auf diese Weise koennen Verbundstoffe auch aus Polyacrylnitrilfasern, Polyamidfaser, Epoxidharz und anderen Stoffen produziert werden.

DESCRIPTORS: VISCOSE STAPLE FIBERS; **ACRYLIC FIBERS** ; POLYAMIDE FIBERS; EPOXIDE RESINS; PHENOL FORMALDEHYDE RESIN; CONDENSATION POLYMERISATION; OLIGOMERS; MONOMERS; FIBER STRUCTURE; **SHEATH CORE STRUCTURE**; COMPOSITE MATERIALS; MECHANICAL PROPERTIES; IMPACT STRENGTH; BENDING STRENGTH; THERMAL PROPERTIES; FIRE PROOFING TREATMENT

14/7,K/6 (Item 6 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management
(c) 2003 FIZ TECHNIK. All rts. reserv.
00651288 T93046002178

Hochmodul-Polyacrylnitrilfasern nach dem Gelspinnverfahren

(High modulus polyacrylonitrile fibres by gel spinning)

Sprenger, S

Univ. Stuttgart, D

1992

Document type: Dissertation Language: German

Record type: Abstract

ABSTRACT:

Mit dem fuer Polyethylen bekannten Gelspinnverfahren sollten Polyacrylnitrilfasern mit hohem Modul und hoher Festigkeit ersponnen werden. Loesungen von Polyacrylnitril in N,N-Dimethylformamid (DMF) konnten unter Verwendung eines gekuehlten Spinnbades aus n-Butanol zu Faeden versponnen werden. Um Heissver Streckung mit hoher Streckrate durchfuehren zu koennen, muss das Loesungsmittel aus den Gelfaeden entfernt werden. Dies kann mittels Aceton in einem diskontinuierlichen Xerogel-Verfahren erfolgen. Mit geringerem Restgehalt an DMF verbessern sich die durch Verstrecken erreichbaren mechanischen Daten. Die optimale Strecktemperatur liegt bei 160 Cel. Die Verstreckbarkeit nimmt mit abnehmender Konzentration der Spinnloesung zu. Verstreckverhaeltnisse von 1:28 sind moeglich. Mit steigender Verstreckung nehmen Reissfestigkeit und Anfangsmodul zu. Nachbehandlung der verstreckten Fasern mit kochendem Wasser verbessert die mechanischen Eigenschaften. Die nach dem Xerogel-Verfahren hergestellten Fasern besitzen Kern-Mantel-Struktur mit glatter Aussenhaut und einem hochfibrillaeren System im Kern sowie aeusserst wenige Makrohohlraeume. Gemaess Roentgenuntersuchungen enthaelt der Xerogelfaden unorientierte, die verstreckte Faser hochorientierte Makromolekuele. Ausgehend von einem

mittleren Molekulargewicht von 1400 kg/Mol lassen sich Fasern mit einer Reissfestigkeit von 68 cN/tex, Reissdehnung von 6 %, einem Anfangsmodul von 2060 cN/tex und einem dynamischen Elastizitätsmodul von 30 GPa erhalten.
DESCRIPTORS: **ACRYLIC FIBERS** ; GEL SPINNING; RESOLVENTS; ELASTIC MODULUS; ELONGATION; MOLECULAR WEIGHT; **SHEATH CORE STRUCTURE**; STRENGTH; DRAWING...

14/7,K/7 (Item 1 from file: 323)

DIALOG(R) File 323:RAPRA Rubber & Plastics

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00794929

TITLE: ACRYLIC RESIN GLOVE AND INTERNAL SURFACE TREATING AGENT THEREOF

AUTHOR(S): Matsuura A; Miyamoto Y; Ochi A

CORPORATE SOURCE: Sumitomo Rubber Industries Ltd.

PATENT NUMBER: EP 1044616 A2

PATENT DATE: 20001018

PATENT COUNTRY/KIND CODE: EP A2

APPLICATION NUMBER: EP 00107906

APPLICATION DATE: 20000413

PRIORITY NUMBER: JP 99107066; JP 99193476; JP 99307610

PRIORITY DATE: 19990414; 19990707; 19991028

JOURNAL ANNOUNCEMENT: 200102 RAPRA UPDATE: 200102

DOCUMENT TYPE: Patent

LANGUAGE: English

SUBFILE: (R) RAPRA

ABSTRACT: The **glove** comprises a film having a crosslinked structure, which is formed of an **acrylic resin** emulsion, and (2) an internal surface treating agent comprising an **acrylic resin** emulsion and at least one organic filler, such as (meth) **acrylic resin** microparticles, polyolefinic resin micro particles or cellulose beads, each having an average particle diameter within the range from 3 to 10 **micrometers**, the content of the organic filler being within the range from 2 to 8% by weight based on the total weight. The **glove** is superior in fitting and detaching properties and in washing resistance while maintaining required mechanical characteristics. The internal surface treating agent provides a **glove** with improved lubricity on its internal surface.

DESCRIPTORS: **ACRYLIC POLYMER** ; ALKENE POLYMER; BEAD; BEADS; CELLULOSE; COMPANIES; COMPANY; CROSSLINK; EMULSION; FILLER; FILM; FILMS; **GLOVE** ; LUBRICITY; MECHANICAL PROPERTIES; METHACRYLIC POLYMER; MICROPARTICLE; OLEFIN POLYMER; PARTICLE; PARTICLE SIZE; PLASTIC; POLYALKENE; POLYMERIC FILLER...

14/7,K/8 (Item 2 from file: 323)

DIALOG(R) File 323:RAPRA Rubber & Plastics

(c) 2003 RAPRA Technology Ltd. All rts. reserv.

00721164

TITLE: THE USE OF SYNTHETIC LATEX IN MEDICAL DIPPED PRODUCTS

AUTHOR(S): Newaz S S

CORPORATE SOURCE: Bayer Corp.

CONFERENCE PROCEEDINGS: 152nd ACS Rubber Division Meeting - Fall 1997.

Reprints

CORPORATE EDITOR: ACS, Rubber Div.

SOURCE: Cleveland, Oh., 21st-24th Oct.1997, paper XII

JOURNAL ANNOUNCEMENT: 199905 RAPRA UPDATE: 199909

DOCUMENT TYPE: Conference Papers

LANGUAGE: English

SUBFILE: (R) RAPRA

ABSTRACT: When the electrical double layer of a dispersion of sub- **micron** latex polymer particles, in water with suitable surfactants, is affected by a strong ionic system, destabilisation occurs to separate the polymer from the aqueous phase. In dipping applications, a former is first dipped into a strong electrolyte solution followed by dipping in properly compounded latex, where the film of the coagulated polymer is deposited on the former. Once the polymer is vulcanised, the typical properties of the particular polymer used are exhibited. Polychloroprene (CR) and carboxylated nitrile (XNBR) latexes are the 2 leading synthetic latexes used in dipped products such as examination and surgical **gloves**, breather bags and catheters. Both the polymer properties and its colloidal characteristics must be considered carefully when selecting the latex for dipping applications. Polymer properties control the final physical features such as tensile strength, elongation and modulus, and the colloidal properties, such as viscosity, particle size, and flow behaviour, affect the operational parameters. Both CR and **NBR** latexes are manufactured by direct emulsion polymerisation. This article presents the typical physical properties of the principal latexes, their compounding and the cured polymer film properties. 11 refs.

DESCRIPTORS: APPLICATION; AQUEOUS EMULSION; BUTADIENE-ACRYLONITRILE COPOLYMER; BUTADIENE-ACRYLONITRILE RUBBER; CARBOXYLATED **NITRILE RUBBER**; CARBOXYLATED RUBBER; CHLOROPRENE RUBBER; COAGULATION; COMPANIES; COMPANY; DATA; DIPPED; DIPPING; DISPERSITY INDEX; ELASTOMER; ELECTRICAL DOUBLE LAYER; ELECTROLYTE; EMULSION; **GLOVE**; LATEX; LATEX DIPPING; LATICES; MEDICAL APPLICATION; PHYSICAL PROPERTIES; POLYCHLOROPRENE; REVIEW; RUBBER; SURFACE ACTIVE AGENT; SURFACTANT; SURGICAL APPLICATION; SURGICAL **GLOVE**; SURGICAL **GLOVES**; SYNTHETIC RUBBER; TABLES; TECHNICAL; UNSUPPORTED

File 624:McGraw-Hill Publications 1985-2003/Aug 11
File 9:Business & Industry(R) Jul/1994-2003/Aug 11
File 16:Gale Group PROMT(R) 1990-2003/Aug 12
File 20:Dialog Global Reporter 1997-2003/Aug 12
File 148:Gale Group Trade & Industry DB 1976-2003/Aug 12
File 160:Gale Group PROMT(R) 1972-1989
File 319:Chem Bus NewsBase 1984-2003/Aug 12
File 481:DELPHEs Eur Bus 95-2003/Aug W1
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Aug 12
File 636:Gale Group Newsletter DB(TM) 1987-2003/Aug 12

Set	Items	Description
S1	137986	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	208529	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	21663	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	51148	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	1512	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	32668	(ACRYLIC OR METHACRYLIC) () ACID OR ACRYLONITRILE
S7	176448	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	1086	S1 AND S2
S9	100	S2(S) S3:S4
S10	0	S2(S) S5(5N) S6
S11	0	S2(S) S5(S) S6
S12	4	S8 AND S9
S13	2	RD (unique items)

13/6/2 (Item 1 from file: 148)

08124425 SUPPLIER NUMBER: 17389671 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Plastics technology: manufacturing handbook & buyers' guide 1995/96. (Buyers Guide)

August, 1995

WORD COUNT: 174436 LINE COUNT: 15187

13/7/1 (Item 1 from file: 9)

DIALOG(R) File 9:Business & Industry(R)
(c) 2003 Resp. DB Svcs. All rts. reserv.
3376770 Supplier Number: 03376770

Hands-on application. (News Materials)

Plastics & Rubber Asia, v 17, n 108, p 10(1)
February 2002

WORD COUNT: 126

TEXT:

TO ENABLE SUSHI to be prepared, kitchen staff usually put on disposable PVC **gloves** to handle the raw fish. Just as sushi is gaining popularity worldwide, so Bayer's Mesamoll is becoming a popular choice of plasticiser in the manufacture of PVC **gloves**.

An ideal product for use in disposable **gloves** and for use with materials in contact with foodstuffs, Mesamoll is suitable for all polymers including PVC, PU, **NBR** and chloroprene rubber. Its gel-like characteristics allow short cycle dipping processes, even at low temperatures, thereby saving energy and reducing costs. Due to its mechanical properties it is possible to produce thin **gloves** with a thickness of around 100 **micrometres**. Being gentle on the skin, these PVC-based **gloves** are also suitable for people who are allergic to latex.

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File 155:MEDLINE(R) 1966-2003/Aug W2
File 5:Biosis Previews(R) 1969-2003/Aug W1
File 73:EMBASE 1974-2003/Aug W1
File 34:SciSearch(R) Cited Ref Sci 1990-2003/Aug W1
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 144:Pascal 1973-2003/Aug W1
File 94:JICST-EPlus 1985-2003/Aug W1
File 65:Inside Conferences 1993-2003/Aug W2
File 8:Ei Compendex(R) 1970-2003/Aug W1
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Jun
File 248:PIRA 1975-2003/Aug W1
File 323:RAPRA Rubber & Plastics 1972-2003/Aug
File 31:World Surface Coatings Abs 1976-2003/Jul
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13

Set	Items	Description
S1	148061	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	156082	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	62173	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	15352	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	4222	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	106653	(ACRYLIC OR METHACRYLIC)() ACID OR ACRYLONITRILE
S7	177175	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	83599	APPAREL OR CLOTHING OR GARMENT? ? OR CLOTHES
S9	153	(S2 AND S8) NOT S1
S10	5	S9 AND S3:S4
S11	0	S9 AND S5(S)S6
S12	5	S10
S13	5	RD (unique items)

13/7,K/2 (Item 1 from file: 248)

DIALOG(R) File 248:PIRA

(c) 2003 Pira International. All rts. reserv.

00524918 Pira Acc. Num.: 20127845

Title: New antibacterial acrylic fibre

Authors: Stevanato R; Tedesco R

Source: Chem. Fibres Int. vol. 48, no. 6, Dec. 1998, pp 480, 482, 485

ISSN: 0340-3343

Publication Year: 1998

Document Type: Journal Article

Language: English

Pira Subfiles: Nonwovens Abstracts (NW)

Journal Announcement: 9904

Abstract: Montefibre of Venice, Italy, has researched an inorganic substrate for silver and zinc ions. The substrate eliminates previous problems connected with adding antibacterial properties to fibres, causing reduced abrasion resistance and spinnability. It has a particle size below 1 micron, and can be added in small amounts to give antibacterial protection without adversely affecting fibre properties. The substrate is a titaniumsilicate with high crystallinity, high specific area and good exchange ability. It can be added to the fibre by dispersal in the spinning solution, and adds permanent antibacterial properties. It can be blended with other fibres. Possible uses include hosiery, underwear and sportswear. (7 fig, 3 tab, 3 ref)

...Descriptors: CLOTHING ;

13/7,K/5 (Item 1 from file: 31)

DIALOG(R) File 31:World Surface Coatings Abs

(c) 2003 Paint Research Assn. All rts. reserv.

00464204 WSCA ABSTRACT NUMBER: 93-01966 WSCA ID NUMBER: 361966

Coating composition with antistatic and heat sealing properties.

PATENT ASSIGNEE: DAICEL CHEMICAL INDUSTRIES;

PATENT INFORMATION: Japanese Unexamined Patent , 11 pp: Jap. Pat. Abs
(Unexamined) 1991, Vol 91 No 40, Gp G, 10.

PATENT (NUMBER,DATE): JP 3192172 19910000

PUBLICATION YEAR: 1991 .

ABSTRACT: The compsn. is used for coatings on automated packaging in the food industry, coatings for electrostatic recording paper, coatings on leather, **clothing** , inorg. materials, etc. It is obtained by mixing an aq. acrylic solution or dispersion (particle diameter no larger than 0.1 **micrometre**) of AV 10-200, and at least 30% neutralised, with another acrylic dispersion in the wt. ratio of 5-50:50-95. The first acrylic comprises an unsatd. carboxylic acid/1-4C alkyl (meth)acrylate copolymer, the second is obtained as a dispersion by copolymerising 100 wt. parts of a comonomer mixture, of which 10-98 wt. % is 1-12C alkyl (meth)acrylate(s), in presence of 0.5-200 wt. % of a (neutralised) unsatd. sulphonic acid (co)polymer.

...DESCRIPTORS: **Acrylic Polymers** ;

...IDENTIFIERS: **Acrylic Polymers** -- blends, antistatic
coatings/heat-sealing materials

File 624:McGraw-Hill Publications 1985-2003/Aug 11
File 9:Business & Industry(R) Jul/1994-2003/Aug 11
File 16:Gale Group PROMT(R) 1990-2003/Aug 12
File 20:Dialog Global Reporter 1997-2003/Aug 12
File 148:Gale Group Trade & Industry DB 1976-2003/Aug 12
File 160:Gale Group PROMT(R) 1972-1989
File 319:Chem Bus NewsBase 1984-2003/Aug 12
File 481:DELPHEs Eur Bus 95-2003/Aug W1
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Aug 12
File 636:Gale Group Newsletter DB(TM) 1987-2003/Aug 12

Set	Items	Description
S1	137992	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	208530	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	21664	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	51148	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	1512	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	32668	(ACRYLIC OR METHACRYLIC)() ACID OR ACRYLONITRILE
S7	176448	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	656	S1(S) S7 NOT S2
S9	1113818	APPAREL OR CLOTHING OR GARMENT? ? OR CLOTHES
S10	2893	(S2 AND S9) NOT S1
S11	72662	S3 OR S4 OR S5(S) S6
S12	3	S10(S) S11

12/3,AB,K/2 (Item 1 from file: 636)

DIALOG(R) File 636:Gale Group Newsletter DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

02810557 Supplier Number: 45702212

FABRICS - A revolution in insulation?

High Performance Textiles, pN/A

August, 1995

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 632

... The PCMs can be applied by incorporating them in microcapsules 1- 60 micronm in diameter. These may then be bonded within the fibrous structure of a nonwoven or, with a coated fabric they can be added to the coating compound. A major UK **acrylic fibre** -producer is investigating the possibility of incorporating PCM microcapsules in its fibres by coating...

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200351

File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	75583	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	194269	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	53141	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	9608	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	13830	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	128760	(ACRYLIC OR METHACRYLIC)() ACID OR ACRYLONITRILE
S7	105685	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	1273	S1 AND S2
S9	63324	S3 OR S4 OR S5(S) S6
S10	35	S8 AND S9
S11	8	S7 AND S10

11/7,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014304806 **Image available**

WPI Acc. No: 2002-125509/200217

**Master batch composition for olefin type thermoplastic elastomer ,
having good sliding properties and mechanical characteristics**

Patent Assignee: SHINETSU POLYMER KK (SHPL)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001192561	A	20010717	JP 20008	A	20000104	200217 B

Priority Applications (No Type Date): JP 20008 A 20000104

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001192561	A		7	C08L-101/00	

Abstract (Basic): JP 2001192561 A

NOVELTY - Master batch composition for olefin type thermoplastic **elastomer** comprises 100 parts by weight (pbw) of (A) un-crosslinked rubber, 5-200 pbw of (B) thermoplastic resin and 50-200 pbw of acryl-modified organopolysiloxane.

DETAILED DESCRIPTION - Master batch composition for olefin type thermoplastic **elastomer** comprises 100 pbw of (A) un-crosslinked rubber, 5-200 pbw of (B) thermoplastic resin and 50-200 pbw of acryl-modified organopolysiloxane. The un-crosslinked rubber (A) is ethylene-propylene rubber, ethylene-propylene-diene copolymer, styrene type rubber, polyester type rubber, acryl type rubber, butadiene type rubber, isoprene type rubber and/or natural rubber. The thermoplastic resin (B) is selected from (B-1) polyethylene, polypropylene, ethylene-propylene copolymer, ethylene-propylene-alpha-olefin copolymer, ethylene-polypropylene type **elastomer** /ethylene-propylene/polyethylene, ethylene-alpha-olefin copolymer, ethylene- **acrylic copolymer** and ethylene-vinyl alcohol copolymer and (B-2) maleic acid-modified compound of (B-1), OH group-adduct of (B-1) and silane-modified compound of (B-1).

USE - The master batch is useful for moldings, e.g., exterior parts of car, e.g., glass-run channel or weather strip, interior parts, e.g., an instrument cover, a horn pad, a crash pad, **glove** box, console box, headrest, armrest, door trim, etc., electronic and electric equipment parts and building material parts.

ADVANTAGE - The olefin type thermoplastic **elastomer** has good sliding properties and mechanical characteristics and is prevented from scumming at opening portion on molding.

pp; 7 DwgNo 0/0

Derwent Class: A18; A26; A85; A95; L03; V04; X12

International Patent Class (Main): C08L-101/00

International Patent Class (Additional): C08F-283/12; C08G-077/22;

C08J-003/22; C08J-005/00; C08L-021/00; C08L-023/02; C08L-023/26;

C08L-051/08

Extension Abstract:

... Olefin type thermoplastic **elastomer** (100 parts by weight (pbw)) and master batch (MB-1) (30 pbw) were mixed for...

...The sheet had Shore D hardness of 72, coefficient of static friction of 0.33 **micron**, coefficient of dynamic friction of 0.21 **micron**, tensile strength of 8.5 MPa, elongation of 530 % but did not cause scam at...

11/7,K/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012988123 **Image available**

WPI Acc No: 2000-159976/200014

Elastomer film glove, useful for medical applications has a dried intermittent spray coating on the interior hand contacting surface and is powder free.

Patent Assignee: MAXXIM MEDICAL INC (MAXX-N)

Inventor: HORWEGE K S; SANCHEZ-GARCIA V; VANDE POL M E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6016570	A	20000125	US 9875747	A	19980511	200014 B

Priority Applications (No Type Date): US 9875747 A 19980511

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6016570	A		10	A41D-019/00	

US 6016570 A 10 A41D-019/00

Abstract (Basic): US 6016570 A

NOVELTY - An **elastomer** film **glove** has a dried intermittent spray coating on the interior hand contacting surface.

DETAILED DESCRIPTION - An **elastomer** film **glove** comprises a hand contacting surface having a textured coating, that is a sprayed, intermittent coating of a dried spray formula adhered to the hand contacting surface. The intermittent coating has raised droplets of the dried spray formula.

USE - The **elastomer** film **glove** is useful as a medical **glove**.

ADVANTAGE - The **glove** is powder free and improves donning by reducing intersurface tack with improved tactile sensation and reduced material consumption.

DESCRIPTION OF DRAWING(S) - The drawing is a perspective view of a **glove** on a **glove** former illustrating the intermittent coating.

pp; 10 DwgNo 1/2

Derwent Class: A14; A17; A25; A96; D22; P21

International Patent Class (Main): A41D-019/00

Technology Focus:

... Preferred Composition: The **elastomer** is polyvinyl chloride or a natural or synthetic rubber. The intermittent coating covers 20-90...

...surface area of the hand contacting surface. The spray formula comprises

a binder of polyurethanes, **acrylic resins** and corresponding derivatives, preferably a polyester polyurethane, a hardener, preferably an oxidized polyethylene or a...
...substantially no extensive viscosity, a filler having a particle size of 1-25 (3-10) **microns**, preferably silicon dioxide, microcrystalline cellulose, calcium carbonate, diatomaceous earth, synthetic aluminosilicates, glass beads, silica or...
...The dried droplets of the spray formula have a diameter of 10-300 (20-100) **microns**. The film **glove** comprises a 0.035-0.150 mm thick base layer of an **elastomeric** polymer that is capable of flexing without disrupting the adhesion of the intermittent coating. The...
...a hardener to increase tactile sensitivity of a wearer and to permit donning of the **glove** without powders or lubricants. The filler is insoluble in the spray formula and has a...

Extension Abstract:

... surfactant) and water to 100 pts.wt. was sprayed onto a polyvinyl chloride plastisol film **glove** (0.08 mm thick, fused at 160-195 degrees C) at 85-90 degrees C. The droplet diameter was 15-100 **microns** and the composition formed a splatter finish on the PVC layer and was air dried to form a unitary structure. A cuff was formed onto the **glove** at 70-80 degrees C which was cooled to 60 degrees C and turned inside out to form a **glove**.

11/7,K/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012588657

WPI Acc No: 1999-394764/199933

Cut-resistant polymeric sheet for e.g. protective garmets, medical equipment and surgical gloves has hard filler particles

Patent Assignee: HOECHST CELANESE CORP (FARH)

Inventor: JOHNSON G J; LANIEVE H L; OAKLEY E O

Number of Countries: 020 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9918156	A1	19990415	WO 98US19344	A	19980915	199933 B
EP 1023384	A1	20000802	EP 98948290	A	19980915	200038
			WO 98US19344	A	19980915	
JP 2001519450	W	20011023	WO 98US19344	A	19980915	200202
			JP 2000514961	A	19980915	

Priority Applications (No Type Date): US 97947169 A 19971008

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9918156	A1	E	21	C08K-011/00	
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Designated States (National): JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

EP 1023384	A1	E		C08K-011/00	Based on patent WO 9918156
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Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

JP 2001519450	W		20	C08L-101/00	Based on patent WO 9918156
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Abstract (Basic): WO 9918156 A1

NOVELTY - Improved cut resistance is achieved using hard filler particles with relatively small particle size.

DETAILED DESCRIPTION - A polymeric sheet comprises: (A) polymeric material, and (B) a hard filler distributed in polymeric material,

having Mohs hardness value at least 3 (preferably at least 4), and average particle size sufficient to ensure cut resistance properties but no greater than 5 **microns** (preferably 1-5 **microns**). INDEPENDENT CLAIMS are also included for a) an article formed of cut-resistant polymeric sheet, which can be a protective garment, a **glove** or a tire; b) a composite comprising polymeric sheet as claimed above and non-woven or woven textile fabric (which may be formed from particle-filled fibers, or non-filled fibers) laminated onto one another; and c) an article comprising the composite as above.

USE - Cut resistant polymeric sheet can be used in production of protective garments, medical equipment, surgical **gloves** etc.

ADVANTAGE - The polymeric sheet and articles produced using polymeric sheet have excellent cut resistance combined with improved flexibility and comfort and relatively smooth surface.

pp; 21 DwgNo 0/0

Derwent Class: A60; A83; A94; A95; F03; F04; F07; P21; P31; P73; Q11

International Patent Class (Main): C08K-011/00; C08L-101/00

International Patent Class (Additional): A41D-013/00; A61B-019/04;

B32B-027/00; B32B-027/20; B60C-001/00; C08J-005/18; C08K-003/00;

D03D-001/00; D04H-001/00; D06M-011/45; D06M-015/507

Technology Focus:

... inch, or it may be in form of film or coating, having thickness below 5 **microns**, or 2-3 mm...

...Preferred Material: Polymeric material is preferably **elastomer**, selected from natural rubber, synthetic rubber and thermoplastic **elastomer**, or from polyvinyl chloride, polyurethane, **nitrile rubber**, vinyl rubber, polyisoprene, neoprene, chloroprene and silicone rubber (preferably from polyurethane, polyvinyl chloride or silicone...

11/7,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012457753

WPI Acc No: 1999-263861/199922

Surgical glove having increased cut-resistance provided by elastomeric coating containing hard filler particles on textile base

Patent Assignee: HOECHST CELANESE CORP (FARH)

Inventor: JOHNSON G J; LANIEVE H L; OAKLEY E O

Number of Countries: 021 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9917626	A1	19990415	WO 98US19345	A	19980915	199922 B
US 6080474	A	20000627	US 97947170	A	19971008	200036
EP 1022963	A1	20000802	EP 98948291	A	19980915	200038
			WO 98US19345	A	19980915	
JP 2001518555	W	20011016	WO 98US19345	A	19980915	200176
			JP 2000514535	A	19980915	

Priority Applications (No Type Date): US 97947170 A 19971008

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9917626 A1 E 37 A41D-031/00

Designated States (National): JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

US 6080474 A B32B-005/16

EP 1022963 A1 E A41D-031/00 Based on patent WO 9917626

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
LU MC NL PT SE

JP 2001518555 W 29 C08J-007/04 Based on patent WO 9917626

Abstract (Basic): WO 9917626 A1

NOVELTY - An article having improved cut-resistance consists of a polymeric article having cut-resistant properties coated with a cut-resistant **elastomer** having particulate filler of Mohs Hardness value of at least 3 distributed within it.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of improving the cut-resistance properties of an initial cut-resistant polymeric article by coating it with the filled **elastomer**.

USE - The article is an **elastomeric** protective garment e.g., **gloves**, especially surgical **gloves** (claimed). Initial article may be a tire (claimed).

ADVANTAGE - The hard filler in the **elastomeric** coating improves cut-resistance without reducing flexibility. It enables **gloves** to have greater comfort and to retain their properties when routinely laundered.

pp; 37 DwgNo 0/0

Derwent Class: A83; A95; A96; D22; F07; F08; P21; P31; P73; Q11

International Patent Class (Main): A41D-031/00; B32B-005/16; C08J-007/04

International Patent Class (Additional): A41D-013/00; A61B-019/04;

B60C-001/00; B60C-009/00; D06M-011/83; D06M-015/00; D06M-015/248;

D06M-015/693; D06N-003/00; D06N-003/06

Technology Focus:

- ... Preferred Article: The initial article is a polymeric or **elastomeric** textile. The initial article is especially a polymeric textile made from a fiber-forming polymer...
- ...Preferred Composition: The coating **elastomer** is polyvinyl chloride, polyurethane, **nitrile rubber**, vinyl rubber, polyisoprene, neoprene, chloroprene, or silicone rubber. The fiber-forming polymer is liquid crystalline...
- ...Preferred Composition: The filler particles are 1 - 5 **microns** in size and are metal, ceramic, or crystalline minerals but especially alumina. The coating is...

11/7,K/5 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012400876

WPI Acc No: 1999-206983/199918

Powder-free medical glove produced from natural or synthetic polymer

Patent Assignee: JOHNSON & JOHNSON MEDICAL MFG SDN BHD (JOHJ); JOHNSON & JOHNSON MFG SDN BHD (JOHJ); ANSELL SHAH ALAM SDN BHD (JOHJ)

Inventor: HASSAN N A; YUEN C C

Number of Countries: 026 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 906731	A2	19990407	EP 98307981	A	19980930	199918 B
US 6019922	A	20000201	US 98163696	A	19980930	200013 N
US 6378137	B1	20020430	US 98163696	A	19980930	200235
			US 2000487108	A	20000119	

Priority Applications (No Type Date): MY 974594 A 19971001; US 98163696 A 19980930

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
EP 906731 A2 E 7 A41D-019/00
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI
US 6019922 A B29C-041/14
US 6378137 B1 A41D-019/00 Div ex application US 98163696
Div ex patent US 6019922

Abstract (Basic): EP 906731 A2

NOVELTY - Coating composition used in medical **glove** is new.

DETAILED DESCRIPTION - A powder-free medical **glove** produced from natural or synthetic polymer comprises an outer side of a silicone-treated surface and an inside of **glove** bonded with a layer formed of an antiblocking composition of a polymer/copolymer, a high density polyethylene particle and a wax. An INDEPENDENT CLAIM is also included for a process for making the above comprising:

(1) forming the **glove** by dip-coating a first layer onto a **glove** form into a solution comprising a coagulant and **glove** -release powders;

(2) forming a second layer over the first layer by dip-coating the **glove** form into an **elastomer** ;

(3) forming a third layer over the second layer by dip-coating over the **elastomer** layer an antiblocking solution comprising a polymer/copolymer, a high density polyethylene particle and a wax;

(4) dip-coating a silicone emulsion over the underlying layers;

(5) subjecting the formed layers to heat to crosslink the **elastomer** and to bond the **elastomer** layer to the antiblocking layer;

(6) removing the finished **glove** from the form and reversing the same so that the first layer becomes the outer side of the **glove** whereas the silicone-treated underlying layers become the inner side of the **glove** ;

(7) washing and rinsing the finished **glove** ;

(8) treating the finished **glove** with a silicone emulsion/wax mixture; and

(9) drying the **glove** .

USE - The coating composition is applicable to other types of **elastomeric** articles, e.g. Clean room **gloves** , **condoms** , caps, catheters, sheets and sheet-type incontinence devices.

ADVANTAGE - The products have good antiblocking properties and lubricate.

pp; 7 DwgNo 0/0

Derwent Class: A17; A18; A25; A26; A32; A60; A96; P21; P31; P73

International Patent Class (Main): A41D-019/00; B29C-041/14

International Patent Class (Additional): A61B-019/04; B29C-041/22;
B29D-031/00; B32B-025/08

Technology Focus:

... Preferred Components: The natural or synthetic polymer includes natural rubber latex, **acrylonitrile butadiene rubber** latex, polychloroprene latex and/or polyurethane latex. The polymer/copolymer includes an anionic aliphatic polyether...

... **density polyethylene** particle is in a micronised form having a particle size of 2-12 **micron** and a m.pt. Of 118-137 degrees C. The wax includes a mixture of...

Extension Abstract:

... A clean **glove** form was immersed in a 20% calcium nitrate coagulant solution containing calcium carbonate as the...

...such that the latex layer deposited on the form had an average thickness

not the
outer
layer

of 180 **microns** . The form with the latex was then dipped into an anti-blocking composition comprising 90...
...the next drying stage in an oven at 70-140 degrees C. During stripping, the **glove** was removed from the form such that the **glove** was reversed resulting in the antiblocking coating becoming the inside (donning) surface. The **glove** was washed and rinsed several times and finally treated with a silicon/wax solution giving a **glove** relatively free of powder with superior donning properties which was soft and had high strength...

11/7,K/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008286190 **Image available**

WPI Acc No: 1990-173191/199023

Latex gloves with microporous inner surface - to facilitate insertion and removal of hand and accommodate pharmacological agents

Patent Assignee: HUTCHINSON SA (HUTC); HUTCHINSON (HUTC); ORLIANGES L (ORLI-I)

Inventor: ARGY G; CHEYMOL A; ORLIANGES L

Number of Countries: 013 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 371850	A	19900606	EP 89403203	A	19891121	199023 B
FR 2639799	A	19900608	FR 8815748	A	19881201	199030
CA 2003547	A	19900601				199033
JP 2191701	A	19900727	JP 89314122	A	19891201	199036
ES 2015506	A	19900901				199039
US 5138719	A	19920818	US 89442592	A	19891128	199236
			US 91734510	A	19910723	
CA 2003547	C	19990615	CA 2003547	A	19891121	199942

Priority Applications (No Type Date): FR 8815748 A 19881201

Cited Patents: 04 14310900; 04 77148200; 4779290

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 371850	A		5		
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Designated States (Regional): AT BE DE ES FR GB IT LU NL SE

US 5138719	A		5	A41D-019/00	Cont of application US 89442592
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CA 2003547	C	F		A61B-019/04	
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Abstract (Basic): EP 371850 A

Latex mouldings for use as a **glove** or a fingerstall have an unsymmetric structure in which the outermost surface is smooth and dense but the wall section zones adjacent to the inner surface contain increasing proportions of voids or microspheres up to a level of 90 to 95% on the internal surface.

USE/ADVANTAGE - Esp. for **gloves** for use by surgeons or other hospital operating theatre staff. Makes the **glove** easier to put on or remove. (5pp DWg.No 3/3)

Abstract (Equivalent): US 5138719 A

Protective medical **glove** or finger stall, made of shaped **elastomeric** material such as latex and contg. microcapsules which are rupturable and hold a pharmacological agent, pref. moisture-free. No microcapsules are on the **glove** exterior, but their density increases inwardly until the interior surface is 90-95% microcapsules, and pref. undulatory.

Pref. the latex contains dehydrating substance such as **acrylic resin** , or mechanical barrier material such as glass micro-discs, or bamboo or C

ASRC Searcher: Jeanne Horrigan
Serial 10/029131
August 12, 2003

16

fibres. Pref. microcapsules dia. is 10-100 **microns** , and mfr. is by moulding.

ADVANTAGE - The **glove** is easily donned.

Derwent Class: A83; A96; B07; D22; P21; P31; P32

International Patent Class (Main): A41D-019/00; A61B-019/04

International Patent Class (Additional): A41D-013/10; A41D-019/04;
A61F-006/04; B29C-041/14

File 348:EUROPEAN PATENTS 1978-2003/Jul W03

File 349:PCT FULLTEXT 1979-2002/UB=20030807,UT=20030731

Set	Items	Description
S1	39499	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	635059	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	30501	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	7594	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	13844	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	77899	(ACRYLIC OR METHACRYLIC) () ACID OR ACRYLONITRILE
S7	81137	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	1376	S2(S) (S3 OR S4 OR S5(5N) S6)
S9	72	S1 AND S8
S10	4	S7(S) S8 AND S9
S11	2	S8/AB AND S9
S12	1	S11 NOT S10
S13	1376	S8/CL
S14	7	S1/TI, AB AND S9
S15	6	S14 NOT S10:S11
S16	14	S1(S) S8
S17	10	S16 NOT (S10 OR S11 OR S15)

10/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00390550

Elasticized vinyl dispersion resins having outstanding storage stability.

Gedehnte Vinyl-Dispersionsharze mit hervorragender Lagerbeständigkeit.

Resines de dispersion de vinyl elastifie presentant une excellente
stabilite au stockage.

PATENT ASSIGNEE:

THE B.F. GOODRICH COMPANY, (201935), 3925 Embassy Parkway, Akron Ohio
44313-1799, (US), (applicant designated states:
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Mikofalvy, Bela Kalman, 142 Brunswick Avenue, Avon Lake, Ohio 44012, (US)
Poledna, David James, 153 Georgette Drive, Grafton, Ohio 44044, (US)

LEGAL REPRESENTATIVE:

von Kreisler, Alek, Dipl.-Chem. et al (12434), Patentanwalte Von
Kreisler-Selting-Werner Deichmannhaus am Hauptbahnhof, D-5000 Koln 1, (DE)

PATENT (CC, No, Kind, Date): EP 390143 A2 901003 (Basic)

EP 390143 A3 910227

APPLICATION (CC, No, Date): EP 90106021 900329;

PRIORITY (CC, No, Date): US 332672 890331

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C08F-265/04

ABSTRACT EP 390143 A2

An elasticized, dispersion-grade vinyl chloride resin powder is provided which not only imparts improved elasticity and reduced hysteresis losses to fluid plastisols made therewith, but also has excellent stability under adverse environmental conditions, insuring consistent performance in plastisols even after said powder has been in storage for several months. This resin powder has an average particle size between about 0.4 and about 4 **microns** and contains between about 0.5 and about 20% by weight of an elasomeric **acrylic polymer** having a T(sub(g)) below about -10(degree)C which is present as discrete particles most of which are at least partly occluded by hard

thermoplastic vinyl chloride polymer formed in situ, which vinyl chloride polymer represents substantially all of the remaining mass of said powder.

Fluid plastisols prepared from said resin powder are also described as well as finished articles of improved resiliency and elasticity, which are made from said plastisols. Also disclosed, are preferred methods of preparing said elasticized resin powders.

ABSTRACT WORD COUNT: 164

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPABF1	1096
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SPEC A	(English)	EPABF1	6716
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Total word count - document A	7812
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Total word count - document B	0
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Total word count - documents A + B	7812
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...SPECIFICATION an end-use is the dip forming of hollow, thin-walled items such as disposable **gloves** for the medical profession. Such **gloves** prepared from previous vinyl chloride plastisols are notably deficient in elasticity, pliability and aesthetic tactile qualities when compared to **gloves** made from natural rubber latex.

One method for obtaining modified vinyl dispersion resins providing improved...to about 20% of the total dry weight of which is composed of the elastomeric **acrylic polymer** particles. This elasticized dispersion-grade resin is recovered as a dry powder via the...valuable in plastisol applications involving fabrication of hollow, thin-walled articles such as sanitary, disposable **gloves** by dip forming or mandrel casting techniques. The improved flexibility and the softer, more pleasing "hand" (or feel) to such **gloves** by using the overpolymerized vinyl chloride resins of this invention in the plastisol composition of... experienced users, e.g. anyone familiar with the major aesthetic differences between disposable (PVC) plastic **gloves** and high quality rubber (natural latex) **gloves**.

The following, non-limiting examples further illustrate the invention and some of the advantageous results...

...CLAIMS said powder containing between about 0.5% and about 20% by weight of an elastomeric **acrylic polymer** material having a T(sub(g)) below about -10(degree)C and which is present as discrete solid particles most of which are less than 0.5 **microns** in diameter, said particles being at least partly coated or occluded by hard thermoplastic vinyl...

...than said elasticized resin powder.

13. A hollow, thin-walled flexible article such as a **glove**, composed essentially of a heat-fused, vinyl chloride plastisol composition, the predominant resinous polymeric constituent...

...chloride resin powder containing between about 1% and about 12% by weight of an elastomeric **acrylic copolymer** material having a T(sub(g)) below about -15(degree)C and ...which is present as discrete solid particles, most of which are less than 0.5 **microns** in diameter, said particles being at least partly coated or overlaid by thermoplastic vinyl chloride...

...homopolymer making up substantially the entire remaining mass of said resinous polymeric constituent, and said **elastomeric acrylic copolymer** material being the product of emulsion polymerization per 100 parts by weight of total monomers...

DIALOG(R) File 349:PCT FULLTEXT
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00776640

PERSONAL CARE ARTICLES

ARTICLES DE SOINS PERSONNELS

Patent Applicant/Assignee:

THE PROCTER & GAMBLE COMPANY, One Procter & Gamble Plaza, Cincinnati, OH
45202, US, US (Residence), US (Nationality)

Inventor(s):

LORENZI Marc Paul, 18 South Avenue, Egham, Surrey TW20 8HG, GB,
SMITH Edward Dewey III, 6880 Man-O-War Lane, Mason, OH 45040, US,

Legal Representative:

REED T David (et al) (agent), The Procter & Gamble Company, 5299 Spring
Grove Avenue, Cincinnati, OH 45217-1087, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200108641 A2-A3 20010208 (WO 0108641)

Application: WO 2000US21011 20000801 (PCT/WO US0021011)

Priority Application: US 99146815 19990802; US 99444343 19991119

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB
GD GE GH GM HR HU ID IL IN IS JP KE KG KR KR (utility model) KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK
SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 25195

English Abstract

The present invention relates to a substantially dry, disposable personal care article comprising: a) a water insoluble substrate comprising a first layer comprising: 1) a nonwoven ply; 2) a polymeric net arranged with said nonwoven ply; and b) a cleansing component disposed adjacent to said first layer, wherein said component comprises from about 10 % to about 1000 %, by weight of the water insoluble substrate, of a lathering surfactant. The present invention further relates to a substantially dry, disposable personal care article suitable for conditioning wherein the above-described article comprises a therapeutic benefit component, disposed adjacent to said water insoluble substrate, wherein said component comprises from about 10 % to about 1000 %, by weight of the water insoluble substrate, of a therapeutic benefit component in addition to or in lieu of the cleansing component. These articles have been found to be particularly useful for personal cleansing applications, namely for the skin and hair.

Fulltext Availability: Detailed Description

Detailed Description

... contained within a bicomponent or dual component fiber. Such bicomponent fibers may have a core- **sheath** configuration or a side-by-side configuration. In either instance, the first layer may comprise...
...or fibers which themselves comprise a combination of the above-listed materials.
For the core- **sheath** fibers, preferably, the cores comprise materials

selected from the group consisting of polyesters, polyolefins having a T_g of at least about 10°C higher than the **sheath** material, and combinations thereof. Conversely, the **sheaths** of the bicomponent fibers preferably comprise materials selected from the group consisting of polyolefins having...

...than the core material, and combinations thereof.

In any instance, side-by-side configuration, core-**sheath** configuration, or solid single component configuration, the fibers of the first layer may exhibit a...30% 15 denier PET fibers, 35% 3 denier bicomponent fibers with PET core and PE **sheath**, and 35% 10 denier bicomponent fibers of the same core-**sheath** composition, and has a basis weight of about 100 grams per square meter (gsm). The...due to relaxation of the scrim has occurred. An intermediate T_g (about 15°C waterborne **acrylic copolymer** is added to the coarse fiber side of the web by kiss roll application at...

...due to relaxation of the scrim has occurred. An intermediate T_g (about 15°C waterborne **acrylic copolymer** is added to the coarse fiber side of the web by kiss roll application at...

...and dried on drying cans until moisture free. An intermediate T_g (about 15°C waterborne **acrylic copolymer** is added to the coarse fiber side of the web by kiss roll application at...

12/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00756996

Individual protective equipment from plaited jersey knitwear especially protective gloves

Individuelle Schutzausrüstung von plattiertem Jersey-Gestrick insbesondere für Schutzhandschuhe

Equipements de protection individuelle, tricotes jersey vanise, et notamment gants de protection

PATENT ASSIGNEE:

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INVENTOR:

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PATENT (CC, No, Kind, Date): EP 711514 A1 960515 (Basic)

EP 711514 B1 990526

APPLICATION (CC, No, Date): EP 95402469 951106;

PRIORITY (CC, No, Date): FR 9413459 941109

DESIGNATED STATES: BE; DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: A41D-013/10; A41D-031/00;

ABSTRACT EP 711514 A1 (Translated)

Protective **gloves** for handling articles of mfr.

Individual protective equipment, esp. **gloves**, made of single knit fabric finished with a microfibre on the exterior part and a high tenacity fibre on the interior part.

Pref. the microfibre is pref. an acrylic fibre, a polyester fibre or a polyamide fibre with a fineness of less than 1 micron. The high tenacity fibre is esp. a fibre of aliphatic or aromatic polyamide, polyamide-imide, polyester or polyethylene.

TRANSLATED ABSTRACT WORD COUNT: 75

ABSTRACT EP 711514 A1

Protective **gloves** for handling articles of mfr.

Individual protective equipment , esp. **gloves** , made of single knit fabric finished with a microfibre on the exterior part and a high tenacity fibre on the interior part.

Pref. the microfibre is pref. an **acrylic fibre** , a polyester fibre or a polyamide fibre with a fineness of less than 1 **micron** . The high tenacity fibre is esp. a fibre of aliphatic or aromatic polyamide, polyamide-imide, polyester or polyethylene.

ABSTRACT WORD COUNT: 77

LANGUAGE (Publication,Procedural,Application): French; French; French

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9921	138
CLAIMS B	(German)	9921	121
CLAIMS B	(French)	9921	141
SPEC B	(French)	9921	667

Total word count - document A 0

Total word count - document B 1067

Total word count - documents A + B 1067

...CLAIMS 6. An equipment according to any of claims 1-5, characterized in that it comprises **gloves** .

7. Use of an equipment according to any of claims 1-6 in the automotive...

15/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01078957

Flexible ignition resistant biregional fiber, and articles made therefrom
Biegsame flammfeste Bikomponentenfaser und Gegenstande aus dieser
Bikomponentenfaser

Fibre bicomposant, souple, ignifuge et articles realises avec cette fibre
bicomposant

PATENT ASSIGNEE:

McCullough, Francis P., (2006771), 1807 Veranda, West Columbia, Texas
77486, (US), (Proprietor designated states: all)

INVENTOR:

McCullough, Francis P., 1807 Veranda, West Columbia, Texas 77486, (US)

LEGAL REPRESENTATIVE:

Prins, Adrianus Willem et al (20903), Vereenigde, Nieuwe Parklaan 97,
2587 BN Den Haag, (NL)

PATENT (CC, No, Kind, Date): EP 949364 A2 991013 (Basic)
EP 949364 A3 991020
EP 949364 B1 030702

APPLICATION (CC, No, Date): EP 99201662 960425;

PRIORITY (CC, No, Date): US 428691 950425

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 771371 (EP 96913936)

INTERNATIONAL PATENT CLASS: D01F-008/18; D01F-009/145; D01F-011/14

ABSTRACT EP 949364 A3

A flexible, ignition resistant, biregional fiber is disclosed, wherein the fiber is preferably derived from a single homogeneous polymeric precursor composition, said biregional fiber comprising an inner core region of a thermoplastic polymeric composition and a surrounding outer **sheath** region of a thermoset carbonaceous material. The biregional fiber is particularly characterized by having a ratio of the radius of the core

region with respect to the total radius of the fiber (r.R) of from about 1:4 to about 1:1.05, an LOI value of greater than 40, a breaking twist angle of from 4 to 13 degrees, and a bending strain value of from greater than 0.01 to less than 50%. In a further embodiment of the invention, a biregional precursor fiber is disclosed, wherein the biregional precursor fiber is preferably derived from a single homogeneous polymeric composition, and wherein said precursor fiber comprises an inner core region of a thermoplastic polymeric composition and a surrounding outer **sheath** region of an oxidation stabilized, thermoplastic polymeric composition. The precursor fiber is particularly characterized by having a breaking twist angle of from 17 to 23 degrees. The invention further resides in a method of making the ignition resistant biregional fiber. Preferred end uses for the ignition resistant biregional fibers are disclosed including thermal insulation; flame resistant and fire blocking insulation; blends of the biregional fibers with other natural or polymeric fibers; coated fibers, composites of a polymeric matrix reinforced with the biregional fibers of the invention, electron conductive fibers for battery electrodes, and the like.

ABSTRACT WORD COUNT: 253

NOTE: Figure number on first page: 03

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199941	647
CLAIMS B	(English)	200327	652
CLAIMS B	(German)	200327	588
CLAIMS B	(French)	200327	752
SPEC A	(English)	199941	17919
SPEC B	(English)	200327	14161
Total word count - document A			18569
Total word count - document B			16153
Total word count - documents A + B			34722

...SPECIFICATION fiber has an inner core region of a thermoplastic polymeric composition and a surrounding outer **sheath** region of a thermoset carbonaceous material. The invention also relates to a biregional precursor fiber...

...upon the degree of carbonization, i.e. carbon content and thickness of the graphitic outer **sheath** region. These fibers have an elongatability to break of from 2% to 5% and are...modulus is, to a great extent, dependent on the degree of carbonization of the outer **sheath** and the depth of carbonization of the fiber per se, i.e. the radial thickness...

...manufacturing cost from an unfiltered polymeric composition such as, for example, an acrylic or sub- **acrylic polymer** that can contain from 0.0001 to 5% by weight particulate matter in which the individual particles have a diameter of less than 0.1 **microns**, preferably less than 0.001 **microns**. Sub- **micron** particles are naturally present in any polymeric composition and thus will also be present in...intended for use as an electrode for a secondary energy storage device, the outer carbonized **sheath** of the fiber preferably has a surface area of from greater than 1 to 150...

A 40k (1k=1000 fibers) tow of **acrylic fibers** containing approximately 94% acrylonitrile, 4% methacrylate and approximately 2% itaconic acid is made by the traditional wet spinning method. The **acrylic fibers** have an average diameter of 11 **microns**. The fiber tow

is then oxidation stabilized in air while under tension at a temperature...
...polarized light microscope and shows a clear differentiation between a black oxidation stabilized thermoplastic outer **sheath** and a translucent to lightly coloured inner, non-oxidized thermoplastic core. The oxidized outer **sheath** of the fiber is not physically separated by a boundary or discontinuity from the non...
...a polarized light microscope shows a clear visual distinction between a black thermoset carbonaceous outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The carbonized outer **sheath** of the fiber is continuous and is not physically separated from the thermoplastic core, when...
...of the invention. The results are set forth below:
The above example was repeated using **acrylic fibers** made by the traditional wet spinning technique and containing approximately 94% acrylonitrile, 4% methacrylate and at least .01% of sub- **micron** impurities, i.e. particles, which are not removed by micro-filtration.. Similar results are obtained...
...a difference in texture and color between the core regions and the black oxidized outer **sheath** regions but do not show a boundary or discontinuity between the regions.

Example 3

A tow of trilobal sub- **acrylic fibers** comprising 83% acrylonitrile, 14% vinyl chloride and 3% itaconic acid units is made by the...
...minutes. The resulting fibers are non-flammable, have a nominal fiber diameter of 8.0 **microns**, an effective fiber diameter of 4 **microns**, and an aspect ratio of greater than 10,000:1 and an LOI of 47...tow of these crimped ignition resistant biregional fibers is produced having a thermoset carbonaceous outer **sheath** and a thermoplastic inner core. The ratio of the radius of the core to the...in Example 1 of copending U.S. application 08/372,446, a tow of trilobal **acrylic fibers** containing approximately 86% acrylonitrile, 13% methacrylate and at least .01% of sub- **micron** impurities, which are not removed by micro-filtration, is extruded by the traditional melt spinning technique using a forming die with trilobally shaped extrusion orifices. The tow of **acrylic fibers** is stretched during extrusion of the fibers to attenuate the fibers and then oxidized in...
...fibers are biregional and have an inner core of a thermoplastic polymer and an outer **sheath** of an oxidized, thermoplastic polymer. The oxidized outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in cross section, by a boundary or discontinuity. The core and **sheath** material of the biregional stabilized fiber, when viewed in cross-section, is continuous. The BRPF...
...The resulting fibers have an inner core of a thermoplastic polymer and an outer carbonized **sheath**. The carbonized outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in cross...thin, flexible measurement electrodes for a portable EKG monitor.

Example 11

A tow of trilobal **acrylic fibers** containing approximately 86% acrylonitrile, 13% methacrylate and at least .01% of sub- **micron** impurities, which are not removed by micro-filtration, is made by traditional melt spinning techniques using a forming die with trilobal shaped extrusion holes. The tow of **acrylic fibers** is stretched during extrusion of the fibers to attenuate the fibers and then oxidized in...
...fiber which are clearly visually distinguishable from each other by a black thermoset carbonaceous outer **sheath** region and a translucent or colorless inner, non-oxidized, thermoplastic core region. The carbonized

outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in cross...

...fiber which are clearly visually distinguishable from each other by a black thermoset carbonaceous outer **sheath** region and a translucent or colorless inner, non-oxidized, thermoplastic core region. The carbonized outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in cross section, by a boundary or discontinuity. The core and **sheath** material of the biregional fiber, when viewed in cross-section is continuous.

Further analysis of...3.8V. Each cell has a coulombic efficiency of greater than 98%.

...modulus is, to a great extent, dependent on the degree of carbonization of the outer **sheath** and the depth of carbonization of the fiber per se, i.e. the radial thickness...manufacturing cost from an unfiltered polymeric composition such as, for example, an acrylic or sub- **acrylic polymer** that can contain from 0.0001 to 5% by weight particulate matter in which the individual particles have a diameter of less than 0.1 **microns**, preferably less than 0.001 **microns**. Sub- **micron** particles are naturally present in any polymeric composition and thus will also be present in...intended for use as an electrode for a secondary energy storage device, the outer carbonized **sheath** of the fiber preferably has a surface area of from greater than 1 to 150...

...region 12 of a thermoplastic polymer and a surrounding outer region of a thermoplastic stabilized **sheath** or a thermoset carbonaceous **sheath**. The fiber has a nominal cross-sectional diameter, when bisected, which is the linear distance...

Example 1

A 40k (1k=1000 fibers) tow of **acrylic fibers** containing approximately 94% acrylonitrile, 4% methacrylate and approximately 2% itaconic acid is made by the traditional wet spinning method. The **acrylic fibers** have an average diameter of 11 **microns**. The fiber tow is then oxidation stabilized in air while under tension at a temperature...
...polarized light microscope and shows a clear differentiation between a black oxidation stabilized thermoplastic outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The oxidized outer **sheath** of the fiber is not physically separated by a boundary or discontinuity from the non...

...a polarized light microscope shows a clear visual distinction between a black thermoset carbonaceous outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The carbonized outer **sheath** of the fiber is continuous and is not physically separated from the thermoplastic core, when...

...of the invention. The results are set forth below:

The above example was repeated using **acrylic fibers** made by the traditional wet spinning technique and containing approximately 94% acrylonitrile, 4% methacrylate and at least .01% of sub- **micron** impurities, i.e. particles, which are not removed by micro-filtration. Similar results are obtained...a difference in texture and color between the core regions and the black oxidized outer **sheath** regions but do not show a boundary or discontinuity between the regions.

Example 3

A tow of trilobal sub- **acrylic fibers** comprising 83% acrylonitrile, 14% vinyl chloride and 3% itaconic acid units is made by the...
...minutes. The resulting fibers are non-flammable, have a nominal fiber

- diameter of 8.0 **microns** , an effective fiber diameter of 4 **microns** , and an aspect ratio of greater than 10,000:1 and an LOI of 47...
- ...CLAIMS a thermoplastic polymeric core and a surrounding outer region of an oxidation stabilized thermoplastic polymeric **sheath** , and wherein said precursor fiber has a breaking twist angle of greater than 17 degrees...
- ...8. The fiber of claim 1, wherein said polymeric fiber is derived from an unfiltered **acrylic polymer** containing from 0.0001 to 5% by weight particulate matter having a diameter of less than 0.1 **microns** .
9. The fiber of claim 1, wherein the ratio (r.R) of the radius of...
- ...CLAIMS a thermoplastic polymeric core and a surrounding outer region of an oxidation stabilized thermoplastic polymeric **sheath** , and wherein said precursor fiber has a breaking twist angle which ranges from 17...
- ...8. The fiber of claim 1, wherein said polymeric fiber is derived from an unfiltered **acrylic polymer** containing from 0.0001 to 5% by weight particulate matter having a diameter of less than 0.1 **microns** .
9. The fiber of claim 1, wherein the ratio (r.R) of the radius of...

15/3,AB,K/4 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00953541

ACTIVATED BIREGIONAL FIBERS AND METHOD FOR THE MANUFACTURE OF THEM

FIBRE(S) ACTIVEE(S) A DEUX REGIONS ET PROCEDE DE FABRICATION DE CETTE (CES)
FIBRE(S)

Patent Applicant/Inventor:

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(Residence), US (Nationality)

Legal Representative:

JUHL Nis H (agent), 10033 Planters Woods Drive, Austin, TX 78730, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200286210 A1 20021031 (WO 0286210)

Application: WO 2002US11938 20020417 (PCT/WO US0211938)

Priority Application: US 2001837772 20010418

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD

SE SG SI SK SL TJ TM TN TT TZ UA UG UZ YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 5288

English Abstract

The invention resides in a novel ignition resistant activated biregional fiber that is extremely flexible due to the presence of an inner core of a thermoplastic polymeric composition in the fiber that is surrounded by an outer **sheath** of activated carbon. The invention also discloses a process for the manufacture of flexible activated biregional fiber(s) by heating oxidation stabilized biregional fibers or carbonaceous biregional fibers in an activating atmosphere for a period of time and at a temperature sufficient to form an activated carbonaceous outer region in the fiber while the inner core of the fiber remain as a thermoplastic polymeric composition. The activated biregional fibers are particularly

characterized by having a highly porous internal structure with an internal surface area of from about 50m²/g to greater than 2000m²/g depending on fiber diameter. Preferred end uses for the biregional activated carbon fiber(s) include, for example, air and water purification, solvent recovery, waste water treatment, the removal of noxious gases such as sulfur dioxide from stack gases, gas separation and storage, etc.

Fulltext Availability:

Detailed Description

Claims

The flexible biregional fiber(s) can also be made more easily and at a substantially...

...manufacturing cost from an unfiltered polymeric material such as, for example, an acrylic or sub- **acrylic polymer** that can contain from about 0.0001 ...about 5% by weight particulate matter having a diameter of less than about 0.1 **microns**, preferably less than 0.001 **microns**. Sub- **micron** particles are naturally present in any polymeric material and thus will also be present in...of an inner core of a thermoplastic polymer and an outer region of an oxidized **sheath**.

5 (7) The fiber is ignition resistance having a LOI of greater ...give improved safety, economics and performance.

ExMple 1

A 400k (1k=1000 fibers) tow of **acrylic fibers** containing approximately 94% acrylonitrile, 4% methacrylate and approximately 2% itaconic acid is made by the traditional wet spinning method. The **acrylic fibers** have an average denier of 4.5 and a diameter of 21.5 **microns**. The fiber tow is then oxidation stabilized in a dynamic flow of air while under...polarized light microscope and shows a clear differentiation between a black oxidation stabilized thermoplastic outer **sheath** and a translucent to lightly colored inner, nonoxidized thermoplastic core. The oxidized outer **sheath** of the fiber is not physically separated by a boundary or discontinuity from the non...a polarized light microscope shows a clear visual distinction between a black thermoset carbonaceous outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The carbonized outer **sheath** of the fiber is continuous and is not physically separated...

15/3,AB,K/6 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00351621

FLEXIBLE IGNITION RESISTANT BIREGIONAL FIBER, ARTICLES MADE FROM BIREGIONAL FIBERS, AND METHOD OF MANUFACTURE

FIBRE BI-ZONE SOUPLE ININFLAMMABLE, ARTICLES REALISES DANS CETTE FIBRE BI-ZONE, ET PROCEDE DE FABRICATION

Patent-Applicant/Assignee:

McCULLOUGH Francis P,

Inventor(s):

McCULLOUGH Francis P,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9634134 A2 19961031

Application: WO 96US6320 19960425 (PCT/WO US9606320)

Priority Application: US 95428691 19950425

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT

RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ KE LS MW SD SZ UG AM AZ BY
KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 22292

English Abstract

A flexible, ignition resistant, biregional fiber is disclosed, wherein the fiber is preferably derived from a single homogeneous polymeric precursor composition, said biregional fiber comprising an inner core region of a thermoplastic polymeric composition and a surrounding outer **sheath** region of a thermoset carbonaceous material. The biregional fiber is particularly characterized by having a ratio of the radius of the core region with respect to the total radius of the fiber ($r:R$) of from about 1:4 to about 1:1.05, an LOI value of greater than 40, a breaking twist angle of from 4 to 13 degrees, and a bending strain value of from greater than 0.01 to less than 50 %. In a further embodiment of the invention, a biregional precursor fiber is disclosed, wherein the biregional precursor fiber is preferably derived from a single homogeneous polymeric composition, and wherein said precursor fiber comprises an inner core region of a thermoplastic polymeric composition and a surrounding outer **sheath** region of an oxidation stabilized, thermoplastic polymeric composition. The precursor fiber is particularly characterized by having a breaking twist angle of from 17 to 23 degrees. The invention further resides in a method of making the ignition resistant biregional fiber. Preferred end uses for the ignition resistant biregional fibers are disclosed including thermal insulation; flame resistant and fire blocking insulation; blends of the biregional fibers with other natural or polymeric fibers; coated fibers, composites of a polymeric matrix reinforced with the biregional fibers of the invention, electron conductive fibers for battery electrodes, and the like.

Fulltext Availability:

Detailed Description

Claims

Detailed Description

...upon the degree of carbonization, i.e. carbon content and thickness of the graphitic outer **sheath** region. These fibers have an elongatability to break of from 2% to 5% and are...
...modulus is, to a great extent dependent on the degree of carbonization of the outer **sheath** and the depth of carbonization of the fiber per se, i.e. the radial thickness...manufacturing cost from an unfiltered polymeric composition such as, for example, an acrylic or sub- **acrylic polymer** that can contain from 0.0001 to 5% by weight particulate matter in which the individual particles have a diameter of less than 0.1 **microns**, preferably less than 0.01 **microns**. Sub- **micron** particles are naturally present in any polymeric composition and thus will also be present in...intended for use as an electrode for a secondary energy storage device, the outer carbonized **sheath** of the fiber preferably has a surface area of from greater than 1 to 150...region 12 of a thermoplastic polymer and a surrounding outer region of a thermoplastic stabilized **sheath** or a thermoset carbonaceous **sheath**. The fiber has a nominal cross-sectional diameter, when bisected, which is the linear distance...

Example 1

A 40k (1 k=1000 fibers) tow of **acrylic fibers** containing

approximately 94% acrylonitrile, 4% methacrylate and approximately 2% itaconic add is made by the traditional wet spinning method. The **acrylic fibers** have an average diameter of 11 **microns**. The fiber low is then oxidation stabilized in air while under tension at a temperature...
...polarized light microscope and shows a dear diflierentiation between a black oxidation stabilized thermoplastic outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The oxidized outer **sheath** of the fiber is not physically separated by a boundary or discontinuity from the non...a polarized light microscope shows a clear visual distinction between a black thermoset carbonaceous outer **sheath** and a translucent to lightly colored inner, non-oxidized thermoplastic core. The carbonized outer **sheath** of the fiber is continuous and is not physically separated from the thermoplastic core, when...

...40-55

Graphite 55

26

SUBSTITUTE SHEET (RULE 26)

The above example was repeated using **acrylic fibers** made by the traditional wet spinning technique and containing approximately 94% acrylonitrile, 4% methacrylate and at least .01 % of sub- **micron** impurities, i.e. particles, which are not removed by micro-filtration. Similar results are obtained...

...Table III below.

TABLE III

Sample Time Temp (*C) Density rR; r-1 Volume % Volume % **sheath**
(min) (91W) and R= core

A 100 194 1.264 6.25 2.6 97...a difference in texture and color between the core regions and the black oxidized outer **sheath** regions but do not show a boundary or discontinuity between the regions.

Example 3

A tow of Nobel sub- **acrylic fibers** comprising 83% acrylonitrile, 14% vinyl chloride and 3% itaconic acid units is made by the...

...have a nominal fiber diameter of 8.0 microns, an effective fiber diameter of 4 **microns**, and an aspect ratio of greater than 1 0,000:1 and an LOI of...

...tow of these crimped ignition resistant biregional fibers is produced having a thermoset carbonaceous outer **sheath** and a thermoplastic inner core. The ratio of the radius of the core to the...in Example 1 of copending U.S. application 08/372,446t a tow of trilobal **acrylic fibers** containing approximately 86% acrylonitrile, 13% methacrylate and at least .01 % of sub- **micron** impurities, which are not removed by micro-filtration, is extruded by the traditional melt spinning technique using a forming die with trilobally shaped extrusion orifices. The tow of **acrylic fibers** is stretched during extrusion of the fibers to attenuate the fibers and then oxidized in...fibers are biregional and have an inner core of a thermoplastic polymer and an outer **sheath** of an oxidized, thermoplastic polymer. The oxidized outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in mu section, by a boundary or discontinuity. The core and **sheath** material of the biregional stabilized fiber, when viewed in moss-section, is continuous. The BRPF...

...The resulting fibers have an inner core of a thermoplastic polymer and an outer carbonized **sheath**. The carbonized outer **sheath** of the fiber is not physically separated from the thermoplastic core, when viewed in cross...spinning techn@ues using a forming die with trilobal shaped extrusion holes. The tow of **acrylic fibers** is stretched during

extrusion of the fibers to attenuate the fibers and then oxidized in...
...fiber which are clearly visually distinguishable from each other by a
black thermoset carbonaceous outer **sheath** region and a translucent or
colorless inner, non-oxidized, thermoplastic core region. The carbonized
outer **sheath** of the fiber is not physically separated from the
thermoplastic core, when viewed in cross...
...fiber which are clearly visually distinguishable from each other by a
black thermoset carbonaceous outer **sheath** region and a V&Wuoent or
colorless; kw, non-oxiclized, thermoplastic core region. The carbonized
outer **sheath** of the fiber is not phpk* separateid from the
thermoplastic core, when viewed in cross...3.8V. Each cell has a
coulombic efficiency of greater than 98%.
...
...thermoplastic polymeric core and a surrounding outer re&n of an
oxidation stabilized thermoplastic polymeric **sheath** , and wherein said
precursor fiber has a breaking twist angle of greater than 17 degrees...
26 The fiber of claim 18, wherein said polymeric fiber is derived from an
unfiltered **acrylic polymer** containing from 0.0001 to 5% by weight
particulate matter having a diameter of km than 0.1 **microns** .
27 The fiber of claim 18, wherein the ratio (rR) of the radius of the...
an inner core region of a thermoplastic polymeric composition and a
surrounding electrically conductive outer **sheath** region of a themioset
carbonaceous material, said outer carbonaceous region have a carbon
content of...

17/6/2 (Item 2 from file: 348)

00414936

Improvements in the formation of melt-spun acrylic fibers.

17/6/3 (Item 3 from file: 348)

00349132

Improvements in the formation of melt-spun acrylic fibers.

17/6/4 (Item 4 from file: 348)

00349130

Improvements in the formation of melt-spun acrylic fibers.

17/6/5 (Item 5 from file: 348)

00222486

Method of manufacturing an optical fibre cable.

17/6/8 (Item 3 from file: 349)

00493146 **Image available**

METHODS AND APPARATUS FOR BONDING DEFORMABLE MATERIALS HAVING LOW
DEFORMATION TEMPERATURES

17/6/9 (Item 4 from file: 349)

00141850

IMAGING ELEMENTS HAVING HYDROPHILIC LAYERS CONTAINING HYDROPHOBES IN
POLYMER PARTICLES AND METHOD FOR MANUFACTURE THEREOF

17/6/10 (Item 5 from file: 349)

00123696 **Image available**

COLLAGEN GEL, PROCESS FOR MAKING IT AND MEMBRANE ARTICLES MADE FROM SAID GEL

17/3,AB,K/6 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT
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00955524

MEDICAL DEVICE

DISPOSITIF MEDICAL

Patent Applicant/Assignee:

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SE (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

LAHTINEN Mika, Tryffelvagen 14, S-756 46 Uppsala, SE, SE (Residence), SE
(Nationality), (Designated only for: US)

LAUKANEN Mikko, -, FI (Residence), FI (Nationality), (Designated only
for: US)

YLA-HERTTUALA Seppo, Ruukinpolku 7, FIN-70910 Vuorela, FI, FI (Residence)
, FI (Nationality), (Designated only for: US)

LEPPANEN Olli-Pekka, Ostra Agatan 51 B, S-753 22 Uppsala, SE, SE
(Residence), SE (Nationality), (Designated only for: US)

Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200287610 A1 20021107 (WO 0287610)

Application: WO 2002SE848 20020430 (PCT/WO SE0200848)

Priority Application: FI 2001898 20010430

Designated States: AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY
BZ CA CH CN CO CR CU CZ (utility model) CZ DE (utility model) DE DK
(utility model) DK DM DZ EC EE (utility model) EE ES FI (utility model)
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK
(utility model) SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 29157

English Abstract

The present invention relates to the use of a gene transfer product to
reduce hyperplastic connective tissue growth after tissue trauma or
implantation of a medical device. The present invention also relates to a
medical device with improved biological properties for an at least
partial contact with blood, bodily fluids and/or tissues when introduced
in a mammalian body, which device comprises a core and a nucleic acid,
encoding a product capable of leading to production of extracellular
superoxide dismutase present in a biologically compatible medium. Said
nucleic acid encodes a translation or transcription product, which is
capable of inhibiting hyperplastic connective tissue growth and promoting
endothelialisation in vivo at least partially on a synthetic surface of
said core. The present invention also relates to a method of producing a
medical device according to the invention.

Fulltext Availability:

Claims

Claim

... be dissolved or polymerised on the implant, such as polyelolefins,
polyisobutylene and ethylene-alphaolefin copolymers; **acrylic polymers**
and copolymers, vinyl halide polymers and copolymers, such as polyvinyl

chloride; polyvinyl ethers, such as...when dry, the hydrogel coating is preferably on the order of about 1 to 10 **microns** thick, and typically of 2 to 5 **microns**. Very thin hydrogel coatings, e.g., of about 0,2-0,3 **microns** (dry) and much thicker hydrogel coatings, e.g., more than 10 **microns** (dry) are also possible. Typically, the hydrogel coating thickness may swell with a factor of...or biguanide moiety (U.S. 5,928,916). When delivering the vascular implant percutaneously, a **sheath** member may be included to inhibit release of the drug into body fluids during placement...

17/3,AB,K/7 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00809860

MEDICAL DEVICE

DISPOSITIF MEDICAL

Patent Applicant/Inventor:

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(Nationality)

Legal Representative:

GOTEBORGS PATENTBYRA DAHLS AB (agent), P.O. Box 606, S-182 16 Danderyd, SE,
Patent and Priority Information (Country, Number, Date):

Patent: WO 200141674 A1 20010614 (WO 0141674)

Application: WO 2000SE2460 20001207 (PCT/WO SE0002460)

Priority Application: SE 994454 19991207; SE 994747 19991223; SE 2000285
20000131

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 33850

English Abstract

The present invention relates to a medical device with improved biological properties for an at least partial contact with blood, bodily fluids and/or tissues when introduced in a mammalian body, which device comprises a core and a nucleic acid present in a biologically compatible medium. Said nucleic acid encodes a translation or transcription product, which is capable of promoting endothelialisation in vivo at least partially on a synthetic surface of said core. The present invention also relates to a method of producing a medical device according to the invention. Further, the present invention also relates to a method of improving a mammalian, preferably human, body's biocompatibility with a synthetic surface, which method comprises introducing a device according to the invention in the body with an at least partial contact with blood, bodily fluids and/or tissues and administering a nucleic acid present in a biologically compatible medium to the surroundings thereof. Said nucleic acid encodes a translation or transcription product capable of promoting endothelialisation in vivo at least partially on said synthetic surface. The administration of nucleic acid may in alternative embodiments be performed before, simultaneously as or after the

introduction of the device in a body. In addition, combinations of these embodiments are also encompassed.

Fulltext Availability: Claims

Claim

... and cured or polymerised on the implant, such as polyelolefins, polyisobutylene and ethylene-alphaolefin copolymers; **acrylic polymers** and copolymers, vinyl halide polymers and copolymers, such as polyvinyl chloride; polyvinyl ethers, such as...when dry, the hydrogel coating is preferably on the order of about 1 to 10 **microns** thick, and typically of 2 to 5 **microns**. Very thin hydrogel coatings, e.g., of about 0,2-0,3 **microns** (dry) and much thicker hydrogel coatings, e.g., more than 10 **microns** (dry) are also possible. Typically, the hydrogel coating thickness may swell with aguanidine or biguanide moiety (5,928,916). When delivering the vascular implant percutaneously, a **sheath** member may be included to inhibit release of the drug into body fluids during...

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200351

File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	75583	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	194269	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	53141	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	9608	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	13830	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	128760	(ACRYLIC OR METHACRYLIC) () ACID OR ACRYLONITRILE
S7	105685	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	124612	GARMENT? ? OR APPAREL OR CLOTHING OR CLOTHES
S9	1123	(S2 AND S8) NOT S1
S10	62	(S3 OR S4 OR S5(S)S6) AND S9
S11	1	S7 AND S10
S12	37911	LATEX
S13	1	(S10 AND S12) NOT S11

11/7,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014285332

WPI Acc No: 2002-106033/200214

Multilayer breathable microporous film highly impermeable to liquids, for disposable hygienic articles, is made by co-extruding mixtures of polyolefin polymers and-or copolymers, forming precursor film, and drawing

Patent Assignee: TRIOPLANEX FRANCE SA (TRIO-N)

Inventor: GUSTAFSON B

Number of Countries: 095 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200183210	A1	20011108	WO 2001FR1351	A	20010503	200214 B
FR 2808470	A1	20011109	FR 20005641	A	20000503	200214
AU 200158484	A	20011112	AU 200158484	A	20010503	200222
EP 1289756	A1	20030312	EP 2001931783	A	20010503	200320
			WO 2001FR1351	A	20010503	

Priority Applications (No Type Date): FR 20005641 A 20000503

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200183210	A1	F	54	B32B-027/20	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

FR 2808470	A1			B29C-047/06	
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AU 200158484	A			B32B-027/20	Based on patent WO 200183210
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EP 1289756	A1	F		B32B-027/20	Based on patent WO 200183210
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): WO 200183210 A1

NOVELTY - Process of production of multilayer steam-permeable polyolefinic film with increased impermeability to liquids, comprises co-extruding, through die, a mixture of polyolefinic polymers and/or copolymers of which at least one contains mineral filler, to give basic

multilayer precursor film containing at least two adjacent layers of same polyolefinic composition with at least structure B-B, and drawing obtained precursor film.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) breathable multilayer microporous film obtained in process as claimed, and having thickness up to 40 (preferably up to 25) **microns** , or 40-100 **microns** , for use in hygienic products; and

(2) use of breathable microporous multilayer film as claimed as backing film (or, after laminating with non woven material, as laminated product) for children diapers and adult incontinence pads, disposable hygienic articles and disposable **clothing** .

USE - In production of backing film (or, after laminating with non woven material, laminated product) for children diapers and adult incontinence pads, disposable hygienic articles and disposable **clothing** .

ADVANTAGE - The film retains steam transmission speed at least 500 g/m2/24 hours (preferably 2000-5000 g/m2/24 hours (at 38degreesC and 90% relative humidity) without deterioration of its liquid impermeability.

pp; 54 DwgNo 0/0

Derwent Class: A18; A32; A96; D22; F07; P34; P73

International Patent Class (Main): B29C-047/06; B32B-027/20

International Patent Class (Additional): A61L-015/24; B29C-055/02;

B29K-023-00; B29K-105-04; B29L-007-00; B32B-005/18; B32B-027/32

Technology Focus:

... and/or copolymer, at least one particular filler and, optionally, one or more polyolefin-based **elastomers** . Adjacent layers B-B contain at least one particular filler mineral or organic, in amount...

...2.16 kg, and temperature 190degreesC for polyethylenes and 230degreesC for polypropylenes (ASTM D 1238). **Elastomers** of adjacent layers B-B are selected from ethylene/propylene (EPR) and modified ethylene/propylene...

...styrene (SEBS), styrene/butadiene (SBR) and butyl (BR) rubbers, styrene/isoprene/styrene (SIS), nitrate/fuel (**NBR**) and hydrogeno-nitrile/butyl rubbers, and polyvinyl acetate, on its own or in mixtures with semi-crystalline polyethylene and/or polypropylene. **Elastomeric** fraction is selected from polypropylenes (homopolymers) with amorphous and semi-crystalline blocks, propylene/ethylene copolymers...

...polar copolymers are selected from those present in layer A, and non-polar ones from **elastomers** present in adjacent layers B-B. Fillers present in layers B-B and C are...

...in B-B layers have average diameter 0.5-5 (preferably 0.8-2.2) **microns** and those of layer C have diameter 0.2-3 (preferably 0.8-1.5) **microns**.

13/7,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013685585 **Image available**

WPI Acc No: 2001-169809/200118

Waterproof, water vapour-permeable plastic film, e.g. for weatherproof clothing , contains synthetic micro-fibres in a matrix comprising a waxy substance and a plastic obtained by emulsion or in-situ polymerisation

Patent Assignee: SANDLER GMBH C H (SAND-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 19918439	A1	20001026	DE 1018439	A	19990423	200118 B

Priority Applications (No Type Date): DE 1018439 A 19990423

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19918439	A1		6	C08J-005/04	

Abstract (Basic): DE 19918439 A1

NOVELTY - Waterproof, water vapour-permeable plastic film consisting of synthetic micro-fibres in a matrix comprising (A) 5-70 wt% of a mainly waxy substance and (B) an essentially anhydrous plastic material obtained by emulsion polymerisation or in-situ polymerisation.

USE - Used, e.g. in weatherproof **clothing** or hygiene articles such as diapers.

ADVANTAGE - Stable plastic film which is both waterproof and permeable to water vapour, cost-effective and made with low machine costs.

DESCRIPTION OF DRAWING(S) - Waterproof, water vapour-permeable film

- (1).
surfaces of film; (2, 7)
synthetic micro-fibres; (3)
matrix; (4)
fibre islands on surface; (5)
part of surface with no fibre islands (6).
pp; 6 DwgNo 1/1

Derwent Class: A18; A23; A25; A83; A96; D22; F07; P73

International Patent Class (Main): C08J-005/04

International Patent Class (Additional): B32B-027/12

Technology Focus:

... B) obtained by emulsion polymerisation comprise acrylates, polyvinyl acetate (PVA), ethylene/vinyl acetate copolymers (EVA), **NBR** or SBR **latex**, styrene-acrylates and/or polyurethanes (PUR), preferably thermally crosslinkable plastics of these types. Plastics...

Extension Abstract:

... Melt-blown polypropylene fleece (15 g/cm²; average fibre diameter 2 **microns**) was combined with a matrix material (A) comprising 30 wt% n-octadecane homogeneously dispersed in...

File 348:EUROPEAN PATENTS 1978-2003/Jul W03

File 349:PCT FULLTEXT 1979-2002/UB=20030807,UT=20030731

Set	Items	Description
S1	39499	CONDOM? ? OR GLOVE OR GLOVES OR SHEATH? ?
S2	635059	MICROMETER? ? OR MICROMETRE? ? OR MICRON? ? OR UM
S3	30501	ACRYLIC() (FIBER? ? OR FIBRE? ? OR POLYMER? ? OR RESIN? ?)
S4	7594	NITRILE() RUBBER OR NITRILE() BUTADIENE() RUBBER OR NBR
S5	13844	THERMOPLASTIC() (POLYMER? ? OR COPOLYMER? ?)
S6	77899	(ACRYLIC OR METHACRYLIC)() ACID OR ACRYLONITRILE
S7	81137	ELASTOMER? OR NATURAL() LATEX OR LATEX() RUBBER
S8	29257	GARMENT? ? OR CLOTHES OR CLOTHING OR APPAREL
S9	7637	(S2 AND S8) NOT S1
S10	58	(S3 OR S4 OR S5(S)S6) (S)S2 AND S9
S11	12	S7 (S)S10

11/6/8 (Item 5 from file: 349)

00336837 **Image available**

MECHANICALLY COMPATIBILIZED FILM/NONWOVEN LAMINATES

11/6/9 (Item 6 from file: 349)

00252012

BIODEGRADABLE, LIQUID IMPERVIOUS MONOLAYER FILM COMPOSITIONS

11/6/10 (Item 7 from file: 349)

00222751 **Image available**

LAUNDERABLE RETROREFLECTIVE APPLIQUE

11/6/11 (Item 8 from file: 349)

00191713 **Image available**

HIGH-TEMPERATURE OIL-RESISTANT ELASTOMERS

11/6/12 (Item 9 from file: 349)

00181620

DISPERSION COMPOSITION AND METHOD FOR MAKING AND USING SAME

11/3,AB,K/2 (Item 2 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00364560

Absorbent elastomeric wound dressing.

Absorbierender elastomerischer Wundverband.

Pansement absorbant elastomere pour blessure.

PATENT ASSIGNEE:

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33427, St. Paul, Minnesota 55133-3427, (US), (applicant designated
states: DE;ES;FR;GB;IT;NL;SE)

INVENTOR:

Riedel, John E., c/o Minnesota Mining and Manufacturing Company, St. Paul
Minnesota 55144-1000, (US)

LEGAL REPRESENTATIVE:

Baillie, Iain Cameron et al (27951), c/o Ladas & Parry Altheimer Eck 2,
D-80331 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 341870 A2 891115 (Basic)

EP 341870 A3 900110

EP 341870 B1 940615

APPLICATION (CC, No, Date): EP 89304288 890428;

PRIORITY (CC, No, Date): US 194082 880513
DESIGNATED STATES: DE; ES; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: A61L-015/16; D04H-001/56;
ABSTRACT EP 341870 A2

An elastomeric nonwoven absorbent web is provided. The web comprises a nonwoven fibrous matrix of elastomeric melt-blown small diameter fibers and absorbent staple fibers or absorbent particulate material, wicking staple fibers, and bulking staple fibers dispersed throughout the matrix. This web is particularly useful in an absorbent elastomeric wound dressing. The wound dressing has a fluid permeable, compliant, low adherency wound contacting layer, an intermediate conformable, fluid-absorbent element, i.e., the elastomeric nonwoven absorbent web, and a soft, compliant cover layer.

ABSTRACT WORD COUNT: 84

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF1	542
CLAIMS B	(English)	EPBBF1	495
CLAIMS B	(German)	EPBBF1	477
CLAIMS B	(French)	EPBBF1	615
SPEC A	(English)	EPBBF1	3852
SPEC B	(English)	EPBBF1	4108
Total word count - document A			4394
Total word count - document B			5695
Total word count - documents A + B			10089

...SPECIFICATION Invention

The wound dressings of the present invention are based on absorbent materials which utilize **elastomeric** nonwoven webs as a delivery matrix for a variety of vehicles useful for wound management. Exemplary **elastomeric** materials which can be used to prepare the nonwoven **elastomeric** webs include polyurethane **elastomeric** materials, polyester **elastomeric** materials, polyamide **elastomeric** materials, and A-B-A block copolymer materials where the A end groups are styrenic moieties and B is an **elastomeric** midblock. Particularly preferred are polyurethane **elastomeric** materials. The nonwoven **elastomeric** webs are preferably formed as a melt-blown web of small diameter fibers as described...

...Superfine Thermoplastic Fibers," in Industrial Engineering Chemistry, Vol. 48, pages 1342 et seq (1956). The **elastomeric** meltblown small diameter fibers preferably have an average diameter of about 5 to 30 **microns**. Preferably the **elastomeric** melt-blown small diameter fibers are present in the **elastomeric** nonwoven absorbent web in an amount of about 10 to 20 weight percent, more preferably...

...SPECIFICATION Invention

The wound dressings of the present invention are based on absorbent materials which utilize **elastomeric** nonwoven webs as a delivery matrix for a variety of vehicles useful for wound management. Exemplary **elastomeric** materials which can be used to prepare the nonwoven **elastomeric** webs include polyurethane **elastomeric** materials, polyester **elastomeric** materials, polyamide **elastomeric** materials, and A-B-A block copolymer materials where the A end groups are styrenic moieties and B is an **elastomeric** midblock. Particularly preferred are polyurethane **elastomeric** materials. The nonwoven **elastomeric** webs are preferably formed as a melt-blown web of small diameter fibers as described...

...Superfine Thermoplastic Fibers," in Industrial Engineering Chemistry, Vol. 48, pages 1342 et seq (1956). The **elastomeric** meltblown small diameter fibers have an average diameter of 5 to 30 **microns**. The **elastomeric** melt-blown small diameter fibers are present in the **elastomeric** nonwoven absorbent web in an amount of 10 to 20 weight percent, preferably 12 to...

11/3,AB,K/4 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00967033

BARRIER COATINGS FOR ELASTOMERIC MATERIALS

REVETEMENTS D'ARRET POUR MATERIAUX ELASTOMERES

Patent Applicant/Assignee:

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Patent Applicant/Inventor:

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CUOMO Jerome J, 108 Kinnaird Lane, Cary, NC 27511, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

MYERS BIGEL SIBLEY & SAJOVEC (agent), P.O. Box 37428, Raleigh, NC 27627, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2002100928 A1 20021219 (WO 02100928)

Application: WO 2002US18342 20020611 (PCT/WO US0218342)

Priority Application: US 2001297676 20010612

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15571

English Abstract

An article of manufacture includes an elastomeric substrate and a plasma deposited polymeric coating on a portion of the elastomeric substrate. The polymeric coating can include a crosslinked amorphous polymer represented by a formula selected from the group consisting of: (1) $M^{\text{sup}1}x^{\text{sub}}C^{\text{sub}}y^{\text{sub}}H^{\text{sub}}z^{\text{sub}}a^{\text{sub}}n^{\text{sub}}b$ wherein $M^{\text{sup}1}$ is a metal selected from the group consisting of titanium, silicon, tantalum, germanium, boron, zirconium, aluminum, hafnium, and yttrium, wherein x ranges from 0 to 1, y ranges from 0 to 12, z ranges from 0 to 28, a ranges from 0 to 4, and b ranges from 0 to 4, subject to the proviso that at least one of $M^{\text{sup}1}$ or C must be present and at least one of C, H, O, or N must be present in said polymeric coating composition, except that $M^{\text{sub}1}$ and H may not be exclusively present; and (2) $M^{\text{sup}2}c^{\text{sub}}C^{\text{sub}}d^{\text{sub}}H^{\text{sub}}e^{\text{sub}}O^{\text{sub}}f^{\text{sub}}N^{\text{sub}}g$ wherein $M^{\text{sup}2}$ is a metal selected

from the group consisting of titanium, tantalum, germanium, boron, zirconium, aluminum, hafnium, and yttrium, wherein c ranges from 0 to 1, d ranges from 0 to 12, e ranges from 0 to 28; f ranges from 0 to 4, and g ranges from 0 to 4, subject to the proviso that at least one of M^{sup}2 or C must be present and at least one of C, H, O, or N must be present in said polymeric coating composition, except that M^{sup}2 and H may not be exclusively present.

Fulltext Availability: Detailed Description

Detailed Description

... to polymeric coatings and methods of using the same.

1 0

Background of the Invention

Elastomers and rubbers are typically composed of long tangled chainlike molecules that uncoil and recoil under...

...internal flexibility makes these materials flexible and highly elastic.

These properties have 1 5 made **elastomeric** materials extremely useful in a number of applications. The majority of the **elastomers** and rubber

...of the materials are, for the most part, employed in consumer products

such as shoes, **clothing**, furniture, and toys and mechanical parts such as mountings, belts, hoses, tubing, and seals such gaskets, O-rings, and

stoppers. To optimize and customize materials for these various

applications, **elastomers** and rubbers are usually compounded with processing

aids and softeners, such as oils and plasticizers...surfaces or contaminating

sensitive processes. Water vapor, oxygen and other gases are typically

permeable through **elastomers**, limiting the vacuum levels that can be

achieved with rubber O-rings requiring the use...

11/3,AB,K/5 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00917861

BIAXIALLY EXTENDIBLE MATERIAL

MATERIAU EXTENSIBLE BIAXIALEMENT

Patent Applicant/Assignee:

KIMBERLY-CLARK WORLDWIDE INC, 401 North Lake Street, Neenah, WI 54956, US
, US (Residence), US (Nationality)

Inventor(s):

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SMITH Reginald, 11250 Hembree Springs Drive, Roswell, GA 30076, US,

Legal Representative:

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2800 West Higgins Road, Hoffman Estates, IL 60195 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200251627 A2-A3 20020704 (WO 0251627)

Application: WO 2001US48328 20011211 (PCT/WO US0148328)

Priority Application: US 2000749141 20001227

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English
Fulltext Word Count: 11095
English Abstract

A biaxially extendible, breathable laminate having liquid barrier properties and low retractive force. The laminate includes a nonwoven web neck-stretched in a first direction to impart extendibility of the web in a second direction mutually perpendicular with the first direction, and a film that is extendible in the second direction. The film can be a breathable, microporous film, and either be an inelastic film stretched to form rugosities in the second direction, or can be made of an extendible polymer that is extendible in the second direction. Using an appropriate elastomeric lamination and/or creping adhesive, the laminate (20) is creped to produce extendibility in the first direction with some retractive force. The biaxial extendible laminate (20) is particularly useful as an outer cover for diapers and other personal care products.

Fulltext Availability: Detailed Description
Detailed Description

- ... for material used to make outer covers of absorbent articles. For example, in pant-like **garments**, machine direction extendibility is desirable because longitudinal conformability allows a crotch region of the **garment** to sag and bulge when loaded without pulling the waistband of the product down. Similarly...
- ...5 Some materials, such as necked stretch-bonded laminates (NSBL), necked/creped spunbond attached to **elastomerics**, etc., have all-direction stretch, i.e., elongation with power recovery. These materials are relatively expensive because of the inclusion of relatively expensive **elastomeric** materials. However, high recovery forces are not always desirable in outer cover materials. Low recovery forces allow the **garments** to remain in a conforming shape on the wearer without exerting a considerable amount of retractive pressure and without restricting a wearer's movements. Furthenmore, when the **garments** are filled up by the wearer, low recovery forces allow the weight of the **garment** contents to pull the **garment** contents away from the wearer's body without pulling the rest of the **garment** down on the wearer's body, thereby maintaining close contact between the wearer and the **garment** in the waist area and around the leg openings to prevent leakage of any gannent...above are suitable for use in any film layer.
- The skin layer typically includes extrudable **thermoplastic polymers** and/or additives which provide specialized properties to the striated, inelastic film layer 22. Thus...
- ...blends of polyolefins as well as ethylene vinyl acetate (EVA), ethylene ethyl acrylate (EEA), ethylene **acrylic acid** (EAA), ethylene methyl acrylate (EMA), ethylene butyl acrylate (EBA), polyester (PET), nylon (PA), ethylene vinyl alcohol (EVOH), polystyrene (PS), polyurethane (PU), and olefinic thermoplastic **elastomers**, which are multistep reactor products wherein an amorphous ethylene propylene random copolymer is molecularly dispersed...
- ...osy) or grams per square meter (gsm) and the fiber diameters are usually expressed in **microns** ...

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200351
File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)
File 371:French Patents 1961-2002/BOPI 200209
Set Items Description
S1 172 AU='WILLIAMS J'
S2 104891 ELASTOMER?
S3 4 S1 AND S2

3/26, TI/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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013883503

WPI Acc No: 2001-367716/200138

Textile fabric used as, e.g. surface fabric in automotive applications, comprises elastomeric synthetic yarns in open weave structure formed by two sets of intersecting yarns

3/34/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014736949 **Image available**

WPI Acc No: 2002-557653/200259

Glove for use during medical examination and in laboratory, comprises thin elastomeric film which contains synthetic polymer cross-linked with cross-linking agent containing metal oxide

Patent Assignee: KIMBERLY-CLARK WORLDWIDE INC (KIMB); WARNEKE D (WARN-I); WILLIAMS J (WILL-I)

Inventor: WARNEKE D; WILLIAMS J

Number of Countries: 098 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200250177	A2	20020627	WO 2001US49015	A	20011219	200259 B
US 20020114943	A1	20020822	US 2000745187	A	20001221	200262
AU 200231015	A	20020701	AU 200231015	A	20011219	200264

Priority Applications (No Type Date): US 2000745187 A 20001221

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 200250177	A2	E	18 C08K-003/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020114943	A1	C08C-019/22
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AU 200231015	A	C08K-003/00	Based on patent WO 200250177
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Abstract (Basic): WO 200250177 A2

NOVELTY - A glove comprises a thin **elastomeric** film which contains a synthetic polymer which is cross-linked with a cross-linking agent containing a metal oxide.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) **Elastomeric** article made from a thin **elastomeric** film; and
- (2) Production of **elastomeric** articles.

USE - As surgical gloves, medical examination gloves, laboratory gloves and gloves worn during manufacture of electronic components.

ADVANTAGE - The glove is free of sulfur and has physical properties that are similar to natural rubber latex articles and articles made from synthetic polymers such as nitrile polymers.

DESCRIPTION OF DRAWING(S) - The figure shows the graphical representation of the relationship between percentage elongation and tensile of BARRIERPRO BP 2000 copolymer, nitrile and natural latex.

pp; 18 DwgNo 1/2

Technology Focus:

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Metal Oxide: The metal oxide is zinc oxide, magnesium oxide or cadmium oxide.

Derwent Class: A96; D22

International Patent Class (Main): C08C-019/22; C08K-003/00

International Patent Class (Additional): B32B-001/00; C08C-019/00;
C08C-019/42; C08F-008/00; C08F-008/42; C08F-008/44; C08F-032/00;
C08F-132/00; C08F-232/00

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200351

File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	176	AU='WILLIAMS J L'
S2	104891	ELASTOMER?
S3	4	S1 AND S2 [not relevant]

File 348:EUROPEAN PATENTS 1978-2003/Jul W03

File 349:PCT FULLTEXT 1979-2002/UB=20030807,UT=20030731

Set Items Description

S1 5 AU='WILLIAMS JALI' OR AU='WILLIAMS JALI LAMAR' OR AU='WILL-
IAMS JALI 188 MOO 1 1ST FLOOR'

1/3,AB/3 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01023906

ELASTOMERIC ARTICLE WITH IMPROVED GRIPPING SURFACE

ARTICLE ELASTOMERE AVEC SURFACE DE PREHENSION AMELIOREE

Patent Applicant/Assignee:

KIMBERLY-CLARK WORLDWIDE INC, 401 N. Lake Street, Neenah, WI 54956, US,
US (Residence), US (Nationality)

Inventor(s):

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Legal Representative:

MANGELSEN Christina L (agent), Dority & Manning, P.A., One Liberty

Square, 55 Beattie Place, Suite 1600, Greenville, SC 29601 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200353663 A1 20030703 (WO 0353663)

Application: WO 2002US28327 20020906 (PCT/WO US0228327)

Priority Application: US 200129131 20011220

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 5628

English Abstract

The present invention is directed to the production of elastomeric articles, such as elastomeric gloves, which can be easily stripped from forming molds, provide good tactile and gripping characteristics, and can be powder free with no halogenation or surface treatments. In general, the elastomeric articles of the invention include an ultra-thin outer layer formed of an acrylic-based polymer and a base polymer layer coagulated onto the surface of the outer layer which forms the primary matrix of the elastomeric article. The ultra-thin outer layer of the articles can be between about 0.25 microns and about 8.0 microns thick.

1/3,AB/5 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00545947

READILY DONNED, POWDER-FREE ELASTOMERIC ARTICLE

ARTICLE ELASTOMERE NON POUDRE FACILE A REVETIR

Patent Applicant/Assignee:

TACTYL TECHNOLOGIES INC,

Inventor(s):

LITTLETON, Kermit R,
GLORIANI Ronald,
BROWN Garth,
BAKER Jason,
NGUYEN K C,

WILLIAMS Jali Lamar

Patent and Priority Information (Country, Number, Date):

Patent: WO 200009320 A1 20000224 (WO 0009320)

Application: WO 99US16705 19990806 (PCT/WO US9916705)

Priority Application: US 98133056 19980811

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 7625

English Abstract

An elastomeric article such as a glove (20) includes a substrate body (24) made of a styrene-ethylene-butylene-styrene block copolymer, and a donning layer (30) overlying at least one side of the substrate body (24). The donning layer (30) is formed of 1,2 polybutadiene, preferably syndiotactic 1,2 polybutadiene, or a chlorinated mid block unsaturated block copolymer. Optionally, a surfactant layer (32) is present over the donning layer (30) to further improve the donning characteristics. The surfactant layer (32) is preferably an alkyl dimethylbenzyl quaternary, an alkyl trimethyl quaternary, a dialkyl dimethyl quaternary, sodium lauryl sulfate, or pyridinium chloride.